## Global Water Resources Conserves Energy through Lighting Upgrade



## CASE STUDY



Global Water Resources, Inc. is a leading water resource management company that owns and operates 12 utilities, which provide water, wastewater and recycled water services. Conserving natural resources is a core commitment of the company, so it was a natural step for Global Water Resources to reduce the energy consumption of its Maricopa, Arizona facility with more efficient lighting.

Partnering with electrical contractor Red Mountain Lighting & Energy, Global Water Resources completed a full retrofit of the LEED Silver building using MaxLite LED Indirect/Direct Pendants, FlatMax Edge Lit Flat Panels and T5 Lamps. Apart from achieving energy and operational cost savings, the main design concern was to improve light levels throughout the facility. To accomplish these goals, Red Mountain implemented a one-to-one LED retrofit in individual offices and utility rooms, and redesigned the lighting system in the bullpen area to provide more lumens using fewer, and less obtrusive, fixtures.

The lighting inside individual offices consisted of 101 two-lamp volumetric troffers, each of which housed 28-watt fluorescent T5 lamps. The troffers were replaced by MaxLite 2'x4' 40W FlatMax Edge Lit Panels, which increased light output to 4,000-plus lumens per fixture, while reducing overall energy consumption. The panels were paired with Lutron Vive dimmers to further conserve energy and customize light output to employee preferences.

"With the old lighting system, our employees had difficulty reading paperwork at their desks because of the very low light levels. Now they are able to review documents comfortably.

In the bullpen especially, light is much brighter and uniform, and the slim design of the MaxLite pendants really opens up the space and makes the room appear much larger."

-- Ron Lakefield, Engineering and Construction Manager, Global Water Resources









In the open office bullpen, employees complained of low light levels and shadows produced by the existing two-lamp indirect/direct fluorescent pendants. By applying a combination of MaxLite LED Indirect/Direct 1'x4' pendants and 2'x4' round pendants, Red Mountain was able to reduce the fixture count (from 73 to 64) and increase lumens to bring much-needed functional light to work areas. The slim form factors of the pendants also contributed to a more open and airy space.





Utility wraps in the training and wellness rooms were retrofitted with MaxLite T5 lamps. The 67 existing two-lamp fixtures were converted from 28W fluorescent to the long-lasting benefits of LED via a simple ballast bypass.

Overall, Global Water Resources was able to reduce energy consumption of the Maricopa facility by 77,581 kWh, which will save the company \$8,675 in electricity and maintenance costs annually.



With over 20 years of knowledge and hands-on experience, Red Mountain Lighting specializes in developing and installing energy efficient lighting solutions for businesses of all types and sizes. Our expertise spans a broad range of industries including commercial properties, manufacturing, civic buildings, healthcare, hotels, restaurants, retail and others across the country. Since 1998, we have been fortunate to work with some of the largest, most respected brands in America, including Intel®, Denny's®, Hilton®, Taco Bell®, IHOP®, The University of San Diego and many others. We have been able to help many clients with their lighting needs and welcome the opportunity to be your long-term lighting partner.

## **MaxLite**

MaxLite has been committed to providing energy-efficient lighting products since 1993. One of the first movers into LED technology in the industry, MaxLite offers an extensive line of quality, certified indoor and outdoor LED lamps and luminaires. A five-time recipient of the ENERGY STAR Partner of the Year Award for its industry leadership, MaxLite continues to be at the forefront of energy-efficient technologies through the innovative research and development capabilities of its teams and facilities in New Jersey, California and Indiana.

